

Remarks

Claims 42-56 are pending. Reconsideration of the rejection of the claims is respectfully requested in view of the following remarks.

- A. Ulwick Fails To Disclose “Establishing A Relationship Between Various Drivers By Representing Each Non-Bridge Variable Driver In Terms Of One Or More Of Said Bridge Variable Drivers Only,” As Required By Each Pending Independent Claim
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Independent claim 42 stands rejected as obvious over Morgan (U.S. Pat. No. 5,799,286) in view of Ulwick (U.S. Pat. No. 6,115,691). Applicant respectfully submits that this rejection should be withdrawn, because the cited references fail to teach or suggest each and every element of the claim. Independent claim 42 recites, *inter alia*, “a computer-implemented method of managing a process ... comprising: identifying activities that comprise the process; identifying measurable drivers associated with a cost for each of the activities; identifying bridge variables, wherein each bridge variable is a driver that is relevant to more than one of said activities; establishing a relationship between various drivers by representing each non-bridge variable driver in terms of one or more of said bridge variable drivers only ... representing each of said activities at least as a function of one or more of said bridge variables, thereby reflecting interdependence¹ between said activities....” The Examiner has acknowledged that

¹ The following example illustrates the important advantages of representing non-bridge variables in terms of one or more bridge variable drivers in a manner that reflects interdependence between the activities. Consider a distribution center (DC) that stores, packs and delivers cases of various products to different customers via trucks. Three of the key activities in the DC are order taking, loading of the trucks, and delivery of the cases to the customers. Each of these activities has its own set of cost drivers, i.e., a) Order taking typically depends on the # of customer orders (whether the customer orders 1 case or 1000 cases, the order taking cost is the same); b) loading of trucks depends on the number of hours needed to load the truck, which in turn depends on the number of cases being loaded; and c) the cost of delivering the cases to the customer depends on the number of trucks needed, the number of miles traveled, and the time spent at the customer unloading the cases (which in turn depends on the number of cases being unloaded.) As can be seen, the 2nd and 3rd activity (loading trucks, and delivery to customer), both depend on the number of cases ordered by the customer. This is therefore a bridge variable, as it drives both activities. By using this

Morgan fails to teach the limitation underlined above. However, the Examiner has reasoned that this limitation is suggested by Ulwick.² In so doing, the Examiner cited to Ulwick at lines 41-67 and Col. 3, lines 27-67, which provide as follows:

The computer program product of the present invention is designed as two separate modules; one for data input and the other as a fixed application shell. By loading mission specific data into the input module, the application shell can instantly become a different software product for different users, markets, or industries. This flexibility enables new software products to be developed quickly and at minimal expense. The data that is manipulated by the software invention is compiled and comprises the collection, prioritization, analysis, and structuring of thousands of facts related to those individuals involved in, or affected by, the mission that is being contemplated. These "customers" may be an end user of a product, a manufacturer, a manager, or one's self when making personal decisions, to name a few. The facts are collected in advance and structured for each specific mission, loaded into the computer, or processor means, stored in predetermined memory locations, and processed by the software. The memory locations comprise a plurality of identifiable data storage array locations that are indexed by the processor and the software of the invention to pull requested or required data to assist the user in evaluating and optimizing their decisions for an unlimited number of missions. Accordingly, the applications of this invention are numerous. For example, by integrating mission specific data into the fixed application shell, the computer program product of the present invention can be adapted to: (1) provide individuals with the ability to create ...

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5. Individuals and businesses usually evaluate only a handful of potential solutions. It is often the case that dozens or even hundreds of other potential solutions exist, but they are never evaluated. It usually takes too much time to uncover and evaluate all possible solutions. The optimal solution is often left undiscovered.

6. Individuals often try to determine, in their head, which of the proposed solutions would best satisfy all the desired outcomes. There are limitations to a human mind, and it is apparent that it would be near impossible for an individual to accurately define the optimal solution given that there are potentially hundreds of solutions and up to 150 desired outcomes for any given strategic situation. There are just too many constants and variables.

bridge variable to model both activities, it is possible to accurately capture the changes in the loading and delivery costs as the case volume changes.

² See Examiner's Answer at 4.

For example, to solve a simultaneous equation in algebra, such as $y=3$ and $y=x+1$, there are two variables given, x and y. Most people cannot solve this relatively simple equation in their head. In most strategic situations, however, there are often over a hundred solutions (variables) and up to 150 desired outcomes (constants) that must be considered in order to effectively solve the equation. Thus, the probability of an individual optimally solving this complex equation in their head is near zero. Despite this fact, businesses and individuals often rely on their internal decision making abilities to determine which solution will best solve a complex strategic equation;

7. Individual and business strategies are often decided on gut feel, intuition, opinion, experience, emotion, history, or some other subjective criteria. Moreover, individuals in an organization often use different criteria to evaluate the same alternative solutions. The solutions are often discussed, argued, negotiated, and eventually compromised to the point where commitment is lacking and implementation is slow. Using subjective or inappropriate criteria to evaluate alternative solutions often produces unpredictable and less than desirable results;

8. Individuals and businesses often lack the ability to quantify the value that one proposed solution has over ...”

Applicant has carefully reviewed the cited portions of Ulwick (and the rest of the reference), and is unable to find any language that teaches or fairly suggests “establishing a relationship between various drivers by representing each non-bridge variable driver in terms of one or more of said bridge variable drivers only,” as required by claim 42.

For this reason, it is respectfully submitted that the Examiner has failed to establish a *prima facie* case of obviousness with respect to independent claim 42 (or independent claims 50 and 53 which contain similar limitations). See, e.g., MPEP §2144.08 (“The fact that a claimed species or subgenus is encompassed by a prior art genus is not sufficient by itself to establish a *prima facie* case of obviousness”) and MPEP 2143.03 (“To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art.”) To the extent that the Examiner maintains the present rejection, Applicant respectfully requests a more complete explanation from

the Examiner detailing how the cited portions of Ulwick fairly suggest “establishing a relationship between various drivers by representing each non-bridge variable driver in terms of one or more of said bridge variable drivers only.”

B. Ulwick Fails To Disclose “Outputting, From Said Model, A Predictive Cost For The Process,” As Required By Each Pending Independent Claim

As amended, the final step of claim 42 recites “outputting, from said model, a predictive cost for the process.” Independent claims 50 and 53 have been amended to contain similar limitations. It is respectfully submitted that this aspect of the claims is neither shown or suggested by Ulwick. In Ulwick, the desired outcome (e.g., a particular predictive cost) is provided as an input to its model, and the model is then used to generate a set of potential solutions that may be employed to achieve the desired outcome. *See*, e.g., Ulwick at col. 6, lines 18-20 (“Desired outcomes … are captured in advance …”) and col. 7, lines 24-25 (“[t]he user is presented with the criteria by which they may evaluate all potential solutions to achieve the desired outcomes.”) By contrast, in the present claims, the predictive cost is not assumed at the outset – but is instead generated and then output using the claimed process. For this further reason, it is respectfully submitted that the independent claims are distinguishable from Ulwick.

C. Ulwick Fails To Disclose “Wherein Said Reconstructing Includes Calculating A Value Of Each Non-Bridge Variable Driver Using Values Of Corresponding Bridge Variables Only,” As Required By Claims 45, 52 and 55

Applicant further submits that the rejection of dependent claim 45 should be withdrawn, because the cited references fail to teach or suggest each and every element of the claim. Independent claim 45 recites, *inter alia*, “wherein said reconstructing includes calculating a value of each non-bridge variable driver using values of corresponding bridge variables only ….” Again, the Examiner has reasoned that this

limitation is suggested by Ulwick. Significantly, however, the Examiner has not provided any specific citation(s) to any column(s)/line(s) or figure(s) of Ulwick that purportedly show this feature.³ Applicant has carefully reviewed Ulwick and is unable to find any teaching or suggestion of the limitation in claim 45 set forth above. For this reason, it is respectfully submitted that the Examiner has failed to establish a *prima facie* case of obviousness with respect to dependent claim 45 (or dependent claims 52 and 55 which contain similar limitations). *See, e.g.*, MPEP §2144.08 (“The fact that a claimed species or subgenus is encompassed by a prior art genus is not sufficient by itself to establish a *prima facie* case of obviousness”) and MPEP 2143.03 (“To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art.”) To the extent that the Examiner maintains the rejection of these dependent claims, Applicant respectfully requests that the Examiner provide specific citations to the column(s)/line(s) or figure(s) of Ulwick that support the Examiner’s position.

In view of the above, it is respectfully submitted that all pending independent claims and pending dependent claims 45, 53 and 55 are clearly distinguishable from Morgan and Ulwick. Each remaining dependent claim depends from an allowable base claim and is therefore also allowable. A Notice of Allowance is therefore earnestly solicited.

³ See Examiner’s Answer at 6.

The Commissioner is hereby authorized to charge any deficiency in the fees due in connection with this filing Deposit Account 50-0310. A duplicate of this authorization is enclosed.

Respectfully submitted,

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